

REMARKS

Applicants affirm the election of Group II.

Claims 10, 11 and 13 have been rejected as being anticipated by Kuo. This rejection is respectfully traversed.

Claim 10 recites, "annealing the caplayer *in situ* at a temperature of from about 150°C to about 550°C." [Italics in original.] On page 4, lines 11-13, the Summary of the Invention states:

"*In situ*" annealing means that the medium was annealed during the manufacturing process without having to remove the medium from a sputtering system to a separate location.

Kuo does **not** disclose or suggest *in situ* annealing. In Kuo, the Co-Tb films are first deposited in "a conventional magnetron" (col. 4, line 37) and "then annealed in a vacuum furnace for 60 minutes" (col. 6, line 56). Persons of ordinary skill in this art would immediately recognize that these two steps of Kuo do not constitute *in situ* annealing as the term "*in situ*" is defined in the specification.

In fact, in column 5, lines 1-6, Kuo *teaches away* from heating the substrate in the claimed *in situ* annealing temperature range during the sputtering process by stating, "if the substrate is heated above 78°C by a heating element the magnetic properties of the Co-Tb film decrease rapidly. This is due to the formation of small low magnetic property crystalline particles in the film." Thus, Kuo maintains the substrate at 25°C during the sputtering process.

Claims 12 and 14-19 are rejected as being obvious over Kuo "for the same reasons as urged in the above paragraph." This rejection is respectfully traversed.

First, *as a whole*, Kuo fails to teach or suggest *in situ* annealing. Second, as explained above, Kuo teaches away from *in situ* annealing. Third, the Examiner has relied on Wu to show that "[t]he limitations of these dependent claims are considered conventional" However, Wu is *not* prior art under 35 USC 103(c) because Seagate Technology LLC commonly owns Wu and this application. Therefore, there is no evidence on the record to support that "[t]he limitations

of these dependent claims are considered conventional" Finally, note that Kuo requires 60 minutes, **3,600 seconds**, of annealing at 250°C when the annealing was done in a furnace (col. 6, line 67), i.e., it was not done *in situ*. On the other hand, Applicants *unexpectedly* found that when annealing is done in situ, it could be completed in "a period not to exceed **15 seconds**" (page 8, line 21, of the specification; emphasis added) at 250-300°C. Therefore, the Examiner should consider the *unexpected results* of this invention.

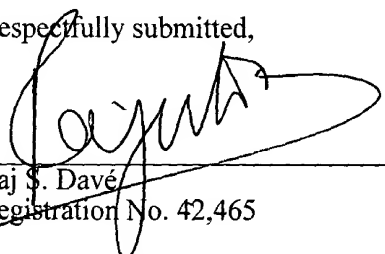
In light of the above, the anticipation and obviousness rejections should be withdrawn and a Notice of Allowance is respectfully solicited.

In the event that the transmittal letter is separated from this document and the Patent and Trademark Office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952**, docket No. 146712001400.

Respectfully submitted,

Dated: October 2, 2002

By:


Raj S. Dave
Registration No. 42,465

Morrison & Foerster LLP
1650 Tysons Boulevard
Suite 300
McLean, Virginia 22102
Telephone: (703) 760-7755
Facsimile: (703) 760-7777